

## ABSTRACT

A voltage regulator is comprised of a semiconductor element for controlling current supplied to a field coil, a flywheel element, a generation voltage regulation circuit for controlling the semiconductor element, and a switching capacity control circuit for controlling a current-switching capacity during a former stage of a turn-off transition period of the semiconductor element to be larger than that during the latter stage of the turn-off transition period. Accordingly, the current change rate can be reduced, so that surge voltage and electro-magnetic wave can be reduced.